

85-069674/12 CIBA GEIGY AG	A97 D25 E23 (E19 E37) 24.08.83-CH-004616 (14.03.85) C11d-07/5	CIBA 24.08.83 *DE 3430-773-A	A(12-W12A, 12-W12B) D(4-C, 11-A18, 11-A19, 11-A3, 11-B1, 11-D3) E(5-B3, 5-L3D, 10-B2D, 10-C2, 10-C4D, 10-C4L, 32-A, 33-D, 33-G, 33-H, 34) 1 1 2
Washing powder additive in speckle from - contg. photo-activator(s) esp. zinc- or aluminium phthalocyanine, water-soluble carbonate(s) and acid(s) soluble at room temp.			The compsns. opt. contain: (D) fillers, dispersants and/or other standard constituents of speckles and washing powders, and (E) one or more substances which keep the speckles at or near the surface of the washing- or soaking bath during dissolution, e.g. surfactants or water-soluble polymers, esp. anionic or nonionic surfactants.
C85-030144	The additive contains:		
(A) one or more photo-bleaching agents, (photo-activators) (B) one or more water-soluble inorganic carbonates; and (C) one or more acids which are solid at room temp. Also claimed are washing powders contg. 0.2-50 (1-20)wt. % of the above additives. ADVANTAGE The speckles dissolve quickly, and are kept at the surface of the bath by the generation of CO ₂ during dissolution. Stains on the material to be washed, e.g. unequal bleaching or colouration, are prevented. COMPOSITION The concn. of (A) is 0.005-8 (0.01-0.8)% wr.t. the wt. of the speckles. Wt. ratio (B):(C) is 1:9 to 9:1(4:6 to 9:1). Wt. ratio (B) + (C) may be 100000:1 to 10:1.			CLAIMED PRODUCTION The washing powder additives are prep'd. by intimately mixing components (A) to (C) and opt. (D) and (E), opt. with the addn. of a non-aq. liq. or a little water and working up the mixt. obtd. by agglomeration, drying or granulation or by pressing to speckles having the desired shape. PREFERRED MATERIALS (A) are esp. water-soluble Zn- and/or Al phthalocyanines esp. sulpho gp-contg. Zn- and/or Al phthalocyanines, esp. having formula <div style="text-align: center;">$(MPc) \begin{cases} R_x \\ (SO_y)_v \end{cases}$</div>

DE3430773-A*

MP = Zn- or Al phthalocyanine ring system;
Y⁺ = H, alkali metal- or ammonium ion;
v = no. 1-4;
R = F, Cl (prefd.), Br or I; and
x = 0-8.
(B) are (bi)carbonates of alkali(ne earth) metals or NH₄, esp. Na₂CO₃ or NaHCO₃.
(C) can be citric-, valeric-, higher monocarboxylic-, ascorbic-, adipic-fumaric-, glutaric-, glutamic-, succinic-, malonic-, maleic-, mandelic-, oxalic-, phthalic-, stearic-, tartaric-, malic-, glycolic- and/or lactic acid, esp. citric- or malonic acid.
(D) can be surfactants, tripolyphosphates, NaCl, Na₂SO₄, CMC, Al silicates, nitriloacetate, ethylene diamine tetraacetate, high mol. wt. carbohydrates, polyvinyl pyrrolidone, polycrylate, and/or salts of maleic acid-acrylic acid copolymers or vinyl ether copolymers.
(E) The surfactants can be soaps, fatty alcohol sulphates olefin- or alkylbenzene sulphonates or EO adducts to fatty alcohols or alkylphenols.

EXAMPLE
1ml 10% aq. soln. of sulphonated Al phthalocyanine and 0.5 ml water were added to 75g NaHCO₃ and 25g citric acid. The mixt. was homogenised, dried 1 hr. at 50°C in a vacuum-

drier, and pressed through a screen having mesh width 800μ. The fines having mesh width 315μ were eliminated.

The speckles were scattered on water at room temp. and generated CO₂ whereby they dissolved immediately and distributed in water.

In a control, using 100g Na tripolyphosphate in place of citric acid + NaHCO₃, the speckles fell to the bottom of the vessel. (25pp200WADwgNo0/0)

DE3430773-A

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